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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,643	12/11/2006	Jurgen Gieshoff	UMICORE 0025-US	8515
23719 7590 12/04/2008 KALOW & SPRINGUT LLP 488 MADISON AVENUE 19TH FLOOR NEW YORK, NY 10022				
EXAMINER				
MATTHIAS, JONATHAN R				
ART UNIT		PAPER NUMBER		
3748				
MAIL DATE		DELIVERY MODE		
12/04/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/556,643

**Applicant(s)**

GIESHOFF ET AL.

**Examiner**

Jonathan Matthias

**Art Unit**

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 11/10/2005

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 6, in Figure 1. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, and 6-8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US PGPUB No. 2002/0053202 to Akama et al. (Akama). Akama discloses:

In reference to claim 1 an oxidation catalyst and a downstream particulate filter, characterized in that a hydrocarbon adsorber is arranged between the oxidation catalyst and the particulate filter (see Fig. 5; Example 16, par. 0095+).

In reference to claims 6 and 8, under the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device (see MPEP 2112.02). Therefore, the limitations of the method claims 6 and 8 are met by the device as disclosed by Akama. Once a reference teaching product appearing to be substantially identical is made the basis of a rejection, the burden shifts to the applicant to show an unobvious difference (see MPEP 2112).

In reference to claim 7, the concentration of hydrocarbons in the exhaust gas is raised by post-injecting hydrocarbons into the cylinders of the internal combustion engine during the storage phases in order to increase the mass of stored hydrocarbons (par. 0104).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akama in view of US Patent No. 6,080,375 to Mussmann et al. (Mussmann).

In reference to claim 2, Akama discloses the system of claim 1, further including the adsorber comprising a honeycomb body that employs a zeolitic coating including platinum as a catalytically active component (see pars. 0095-0100). Akama fails to disclose a specific mixture of zeolites ZSM-5 and DAY. Mussmann is brought in merely to demonstrate that it is conventional to employ zeolites ZSM-5 and dealuminized Y-zeolite (DAY) in a hydrocarbon adsorber (col. 4, line 54 - col. 5, line 8). It has been held that the simple substitution of one known element for another to obtain predictable results is obvious. Therefore it would have been obvious to one having ordinary skill in the art at the time of invention to have substituted a conventional adsorber including a formulation of ZSM-5 and DAY, as suggested by Mussmann, for the system's hydrocarbon adsorber as disclosed by Akama to have the predictable result of hydrocarbon adsorption.

In regards to the limitation of the concentration of platinum in the coating, it has been held that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation

(see MPEP 2144.05 Section II). Therefore, the prior art of Akama meets the limitations of the claim.

In reference to claim 3, the modified Akama discloses the system of claim 2, and further discloses that the oxidation catalyst includes a catalytically active coating of platinum-activated aluminum oxide or aluminum silicate on a honeycomb body (par. 0037).

In reference to claim 4, the modified Akama discloses the system of claim 3, and further discloses that a wall flow filter is used as the particulate filter, which is coated with an oxidation catalyst on the entry side thereof (par. 0050; pars. 0046-0048).

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akama.

Akama discloses the system of claim 1, but fails to specifically disclose the storage capacity of the hydrocarbon adsorber. However, it has been held that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation (see MPEP 2144.05 Section II). Therefore, the prior art of Akama meets the limitations of the claim.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Matthias whose telephone number is (571) 270-5840. The examiner can normally be reached on Monday-Friday 7:00AM-4:00PM.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas E. Denion/  
Supervisory Patent Examiner, Art Unit 3748

JM